

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer-readable storage medium comprising:
a data repository including:
 - access control group data including access group entries, an access group entry identifying an access control group,
 - user access data including user access data entries, a user access entry relating to at least one entry in the access control group data and identifying a user and an access control group, and
 - data object access data including data object access data entries, a data object access data entry relating to at least one entry in the access control group data and identifying a data object and an access control group; andexecutable instructions that, when executed, perform operations comprising:
 - receiving an indication of a user;
 - receiving an indication of a data object;
 - searching the user access data to identify a user access data entry that identifies the indicated user;
 - searching data object access data to identify a data object access data entry that identifies the indicated data object;
 - comparing an access control group identified by the identified user access data entry with an access control group identified by the identified data object access entry;
 - and
 - enabling the indicated user to access the indicated data object conditioned on the access control group identified by the identified user access data entry being the same

access control group as the access control group identified by the identified data object access data entry,

wherein at least one entry in the access control group data includes:

a user characteristic for use in determining at least one entry in the user access data relating to the at least one entry in the access control group data, and
an object characteristic for use in determining at least one entry in the data object access data relating to the at least one entry in the access control group data.

2-4. (Cancelled)

5. (Previously Presented) The medium of claim 1 wherein at least one entry in the access control group data includes an indication of an access control rule for use in determining:

at least one entry in the user access data relating to the at least one entry in the access control group data, and

at least one entry in the data object data relating to the at least one entry in the access control group data.

6. (Previously Presented) The medium of claim 1 wherein at least one entry in the data object access data includes an indication of action that is permitted to be performed on a data object identified in the at least one entry in the data object access data.

7. (Previously Presented) The medium of claim 1 wherein:

at least one entry in the user access data includes an indication of action that is permitted to be performed by a user identified in the at least one entry in the user access data on a data object identified in the at least one entry in the data object access data such that the at least one entry in the data object access data relates to the at least one entry in the user access data.

8. (Previously Presented) The medium of claim 1 wherein the data repository further includes access rule data including access control rule entries, an access control rule entry relating to at least one entry in the access control group data.

9. (Previously Presented) The medium of claim 8 wherein at least one entry in the access rule data includes an indication of action that is permitted to be performed for at least one entry in the data object access data.

10. (Previously Presented) The medium of claim 8 wherein at least one entry in the access rule data includes an indication of how to determine at least one entry in the data object access data that relates to at least one entry in the access control group data.

11. (Previously Presented) The medium of claim 8 wherein at least one entry in the access rule data includes an indication of how to determine at least one entry in the user access data that relates to at least one entry in the access control group data.

12. (Previously Presented) The medium of claim 1 wherein each of the access group data, the user access data, and the data object access data are each separately maintainable from each other.

13. (Previously Presented) The medium of claim 1 wherein each of the user access data and the data object access data are separately maintainable from the other.

14. (Previously Presented) The medium of claim 13 wherein a change in the user access data does not necessitate a change in the data object access data to maintain desired control over access by particular users to particular data objects.

15. (Previously Presented) The medium of claim 13 wherein a change in the data object access data does not necessitate a change in the user access data to maintain desired control over access by particular users to particular data objects.

16. (Previously Presented) A computer-readable storage medium comprising:
a data repository including:

- access control rule data including access control rule entries, an access control rule entry identifying a characteristic method data entry, and

- characteristic method data including characteristic method data entries, a characteristic method data entry relating to at least one entry in the access control rule data and identifying a method to determine a characteristic for a user and identifying a method to determine the characteristic for a data object; and

executable instructions that, when executed, perform operations comprising:

- receiving an indication of a user;

- receiving an indication of a data object;

- accessing an access control rule data entry identifying a characteristic method data entry;

- accessing the characteristic method data entry identified by the access control rule data entry, the characteristic method data entry identifying a method to determine a characteristic for a user and identifying a method to determine the characteristic for a data object;

- determining the characteristic for the user by performing the method to determine the characteristic for the user identified by the characteristic method data structure;

- determining the characteristic for the data object by performing the method to determine the characteristic for the data object identified by the characteristic method data structure; and

- generating access control information that permits the user to access the data object conditioned on the characteristic for the user being the same as the characteristic for the data object.

17. (Previously Presented) The medium of claim 16 wherein the data repository further includes user data.

18. (Previously Presented) The medium of claim 17 wherein at least one entry in the characteristic method data identifies a method to determine a user characteristic associated with at least one entry in the user data.

19. (Previously Presented) The medium of claim 18 wherein at least one entry in the access control rule data includes an indication of a criterion for use in eliminating at least one entry in the user data when using the method to determine a user characteristic.

20. (Previously Presented) The medium of claim 18 wherein at least one entry in the characteristic method data includes an indication of a criterion for use in eliminating at least one entry in the user data when using the method to determine a user characteristic.

21. (Previously Presented) The medium of claim 16 wherein the data repository further includes data object data.

22. (Previously Presented) The medium of claim 21 wherein at least one entry in the characteristic method data identifies a method to determine a data object characteristic associated with at least one entry in the data object data.

23. (Previously Presented) The medium of claim 21 wherein at least one entry in the characteristic method data includes an indication of a criterion for use in eliminating at least one entry in the data object data when using the method to determine a data object characteristic.

24. (Previously Presented) The medium of claim 21 wherein at least one entry in the access control rule data includes an indication of a criterion for use in eliminating at least one entry in the data object data when using the method to determine a data object characteristic.

25. (Previously Presented) An apparatus comprising:
a data repository including:

access control group data including access group entries, an access group entry identifying an access control group,

user access data including user access data entries, a user access entry relating to at least one entry in the access control group data and identifying a user and an access control group, and

data object access data including data object access data entries, a data object access data entry relating to at least one entry in the access control group data and identifying a data object and an access control group; and
executable instructions that, when executed, perform operations comprising:

receiving an indication of a user;

receiving an indication of a data object;

searching the user access data to identify a user access data entry that identifies the indicated user;

searching data object access data to identify a data object access data entry that identifies the indicated data object;

comparing an access control group identified by the identified user access data entry with an access control group identified by the identified data object access entry; and

enabling the indicated user to access the indicated data object conditioned on the access control group identified by the identified user access data entry being the same access control group as the access control group identified by the identified data object access data entry.

26. (Previously Presented) An apparatus comprising:

a data repository including:

access control rule data including access control rule entries, an access control rule entry identifying a characteristic method data entry, and

characteristic method data including characteristic method data entries, a characteristic method data entry relating to at least one entry in the access control rule

data and identifying a method to determine a characteristic for a user and identifying a method to determine the characteristic for a data object; and
executable instructions that, when executed, perform operations comprising:

- receiving an indication of a user;

- receiving an indication of a data object;

- accessing an access control rule data entry identifying a characteristic method data entry;

- accessing the characteristic method data entry identified by the access control rule data entry, the characteristic method data entry identifying a method to determine a characteristic for a user and identifying a method to determine the characteristic for a data object;

- determining the characteristic for the user by performing the method to determine the characteristic for the user identified by the characteristic method data structure;

- determining the characteristic for the data object by performing the method to determine the characteristic for the data object identified by the characteristic method data structure; and

- generating access control information that permits the user to access the data object conditioned on the characteristic for the user being the same as the characteristic for the data object.

27. (Previously Presented) The medium of claim 16 wherein the method to determine the characteristic for the user comprises the method to determine the characteristic for the data object.

28. (Previously Presented) The medium of claim 16 wherein the method to determine the characteristic for the user is different than the method to determine the characteristic for the data object.

29. (Previously Presented) The medium of claim 16 wherein the access control rule data includes a first access control rule entry identifying a first characteristic method data entry and a

second access control rule entry that is different than the first access control rule entry identifying the first characteristic method data entry.

30. (Previously Presented) The medium of claim 16 wherein the characteristic method data includes a first characteristic method data entry identifying a first method to determine a characteristic for a user and a second characteristic method data entry identifying a second method to determine a characteristic for a user, the first method being different than the second method.

31. (Previously Presented) The medium of claim 16 wherein the characteristic method data includes a first characteristic method data entry identifying a first method to determine a characteristic for a data object and a second characteristic method data entry identifying a second method to determine a characteristic for a data object, the first method being different than the second method.